



(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
03.05.2000 Bulletin 2000/18

(51) Int Cl.⁷: **G06F 3/12**

(43) Date of publication A2:
19.05.1999 Bulletin 1999/20

(21) Application number: 98309145.5

(22) Date of filing: 06.11.1998

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

- Fan, Sheng Kuo
Los Angeles, California 90064 (US)
- Fung, Joseph Z
Artesia, California 90701 (US)
- Nesbitt, David P
Redondo Beach, California 90278 (US)

(30) Priority: 07.11.1997 US 966409

(71) Applicant: XEROX CORPORATION
Rochester, New York 14644 (US)

(74) Representative: **Skone James, Robert Edmund**
GILL JENNINGS & EVERY
Broadgate House
7 Eldon Street
London EC2M 7LH (GB)

(72) Inventors:
• Tan, Shee-Yen
Walnut, California 91789 (US)

(54) Improved load balancing of distributed printing systems using enhanced printer attributes

(57) A distributed printing system that more optimally distributes job requests within a distributed printing system based on more detailed information about the particular attributes of each output device. In particular, additional printer attributes are used that allow greater utilization of a plurality of attached printers having differing capabilities. These attributes include "max-concurrent-jobs-processing" (MCJP), "number-of-jobs-on-

device" (NJOD) and "number-of-cascaded-jobs" (NCJ), and a attribute value "saturated" for the attribute "printer-state". The attribute MCJP is an integer value that is based on the capabilities of the printer. NJOB and NCJ attributes allow monitoring of jobs sent to each printer for supported and unsupported printers. If NJOB or NCJ are greater than MCJP, then the attribute "printer-state" is set to "saturated", prohibiting further spooling of print jobs to that particular printer.

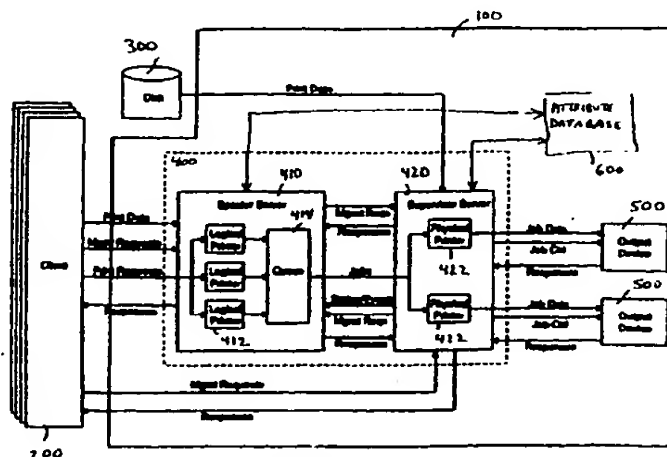


FIGURE 1

BEST AVAILABLE COPY

EP 0 917 044 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 98 30 9145

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	US 5 559 933 A (BOSWELL R STEPHEN) 24 September 1996 (1996-09-24) * the whole document *	1,4,6,7, 10	G06F3/12
A	EP 0 697 648 A (XEROX CORP) 21 February 1996 (1996-02-21) * figures 10-33 * * column 11, line 47 - column 17, line 51 *	1,4-6, 8-10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			G06F H04L
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 13 March 2000	Examiner Weiss, P
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 98 30 9145

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

13-03-2000

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5559933	A	24-09-1996	NONE	
EP 0697648	A	21-02-1996	US 5715381 A	03-02-1998
			JP 8063341 A	08-03-1996

THIS PAGE BLANK (USPTO)